

# 21DQ09

**PRV : 90 Volts**  
**Io : 1.7 Ampere**

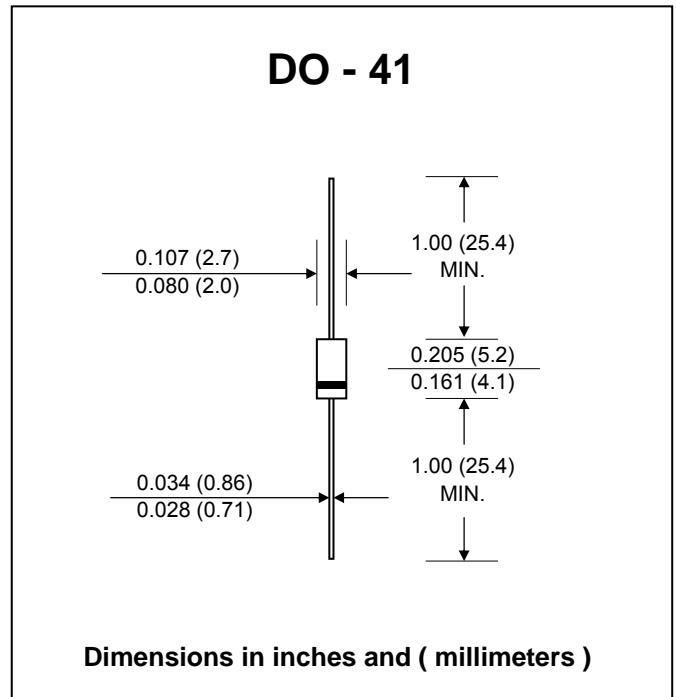
### FEATURES :

- \* High surge capability
- \* High efficiency
- \* Low power loss
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.335 gram

## SCHOTTKY BARRIER DIODE



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

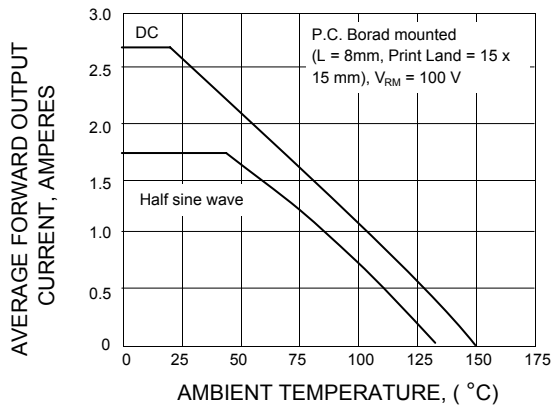
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	90	V
Maximum Average Forward Current , Half Sine wave Resistive Load	$I_{F(AV)}$	1.3 <sup>(1)</sup>	A
$T_a = 32\text{ }^\circ\text{C}$		1.7 <sup>(2)</sup>	
RMS Forward Current	$I_{F(RMS)}$	2.7	A
Maximum Surge Forward Current, Half sine wave, 1 cycle, Non-Repetitive	$I_{FSM}$	70	A
Maximum Forward Voltage at $I_F = 2.0\text{ A}$ , $T_J = 25\text{ }^\circ\text{C}$	$V_F$	0.85	V
Maximum Reverse Current , $V_R = V_{RRM}$ , $T_J = 25\text{ }^\circ\text{C}$	$I_{RM}$	1.0	mA
Maximum Thermal Resistance	$R_{\theta JA}$	105 <sup>(1)</sup>	$^\circ\text{C/W}$
		70 <sup>(2)</sup>	
Operating Junction Temperature Range	$T_J$	- 40 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 150	$^\circ\text{C}$

**Notes :**

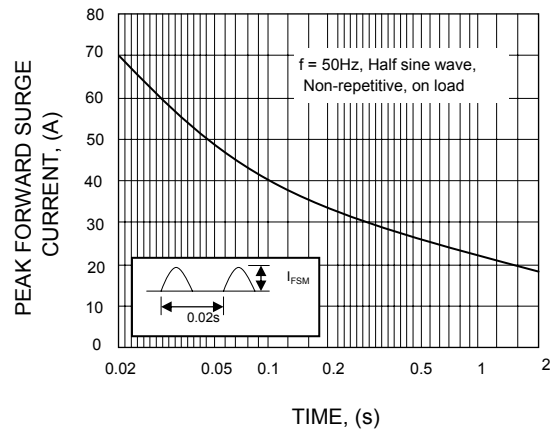
- (1) Without Fin or P.C. Board.
- (2) P.C. Board mounted (Print Land = 5 × 5 mm, Both Sides).

**RATING AND CHARACTERISTIC CURVES ( 21DQ09 )**

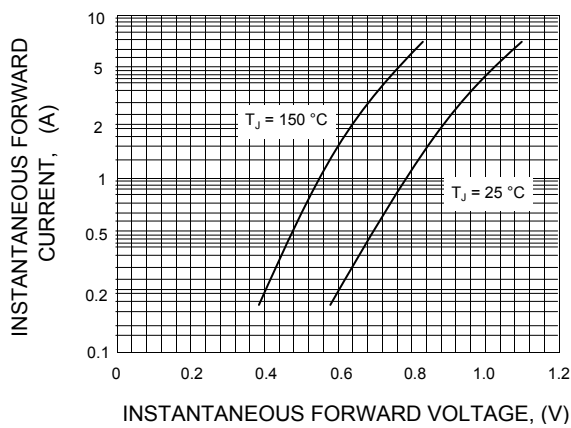
**FIG.1 - AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - FORWARD CURRENT VS. FORWARD VOLTAGE**



**FIG. 4 - JUNCTION CAPACITANCE VS. REVERSE VOLTAGE**

